Minutes, 2/23/04 Tevatron BPM Upgrade Meeting Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

- 1. Drivers for Echotek system -- Charlie Briegel
- 2. Report from Steve and Bob.
- 3. Reports from L2 managers.
- 4. AOB.

# 1. Drivers for Echotek system

- Charlie Briegel came and gave a nice talk about the current Echotek system in the Recycler. I'm not able to give a concise summary. His talk addressed the MVME processor and its interaction with the Echotek boards -- setup, reading, memory mapping, etc. His transparencies are available in AD Doc 1041.

## 2. Report from Bob and Steve.

- The DOE review is Feb 24-26. Talks will be given by Vladimir Shiltsev on the Tevatron, Bob on Instrumentation and Tev BPM, Steve on Tev BPM and Jim on Tev Instrumentation. See the web page for details:

## http://www-bdnew.fnal.gov/doereview04/

- Our requisitions are moving along. The big one -for Echotek or equivalent -- is in the RFP phase as of
Tuesday Feb 17. Quotes are expected in a week or so. The
MVME crate requisition is also out or will be soon for
quotes. The VME crate requisition is (or was) still with
Ken Stanfield. We should not get this one placed until we
have a final understanding of the exact crate design.

## 3. Reports from L2 Managers

Technical Coordinator: Jim Steimel

- The Tevatron shutdown will be about 5 days in March, current schedule is that it will start March 15.

- The request for a beam synch event and the turn-by-turn event, once we understand exactly what we want and need, will go to Greg Vogel in the Controls Group.
- Wire measurements of a Tev BPM on the bench have been made and Jim now has the results. He will start to analyze them and will show results soon.
- Data has been taken with a damper board and a modified RR Echotek, modified to read out I and Q, at the same time to see if we can change to the Echotek for all future measurements. These measurements are being analyzed now.
  - Mike Martens has a plan for studies once we are ready.

#### Rob Kutschke:

- Rob is looking at Feb 18 store data in Echotek compared to Damper board. He has written a note (Doc #1031) with the details. There was a discussion of some of the odd behavior that Rob sees. One fix that can be made is to modify the readout of the I and Q to read out all 4 channels of a BPM (4 I's and 4 Q's) at the same time. This is believed to be possible in a short time.
  - Rob is beginning to work on the offline software specification document.

## Margaret Votava:

- The "final" version of the specifications for the front-end software is just about ready. Bakul will help to get a sign-off of this version from the rest of the project. An updated version will be created once we know the details of the diagnostics and calibrations.

## Brian Hendricks:

- Brian has sent a version 0 of the online software specification document to a few people for comment. Over the next weeks it will be sent to everyone and we will have a series of meetings to discuss.

### 4. AOB.

- The near-term schedule has:

DOE Review Feb 24-26. Closeout 2-3 P.M. Feb 26.

No meetings Wednesday or Thursday unless a topic is

available and time can be found.

May have a meeting Monday March 1 (Jim will call).